

CLAIMS

What is claimed is:

1. An industrial parts washer for cleaning a part, the industrial parts washer comprising:

a stand adapted to support the part;

a chamber selectively moveable from a first position clear of the part to a second position engaging said stand, said stand and said chamber forming a sealed volume encapsulating the part when said chamber is in said second position; and

a nozzle coupled to a pressurized fluid supply, said nozzle being positioned within said chamber and moveable relative to the part.

2. The industrial parts washer of claim 1 further including a frame coupled to said stand, said frame including a pair of inwardly extending portions adapted to support the part.

3. The industrial parts washer of claim 2 further including a lift assembly operable to transfer the part from a first location to a location in contact with said frame.

4. The industrial parts washer of claim 3 wherein the inwardly extending portions are spaced apart from one another, a portion of said lift assembly being positionable between said inwardly extending portions.

5. The industrial parts washer of claim 1 further including a slide supporting said chamber, said slide linearly moveable to selectively position said chamber in said first and second positions, said chamber including an aperture sized and positioned to receive the part during linear movement of said slide.

6. The industrial parts washer of claim 5 further including a moveable guide rod supporting said nozzle and an actuator drivingly interconnecting said guide rod and said slide, said guide rod extending through said slide such that a first portion of said guide rod is positioned within said chamber and another portion of said guide rod is positioned outside of said chamber.

7. The industrial parts washer of claim 6 wherein said actuator is positioned outside of said chamber.

8. The industrial parts washer of claim 5 wherein said chamber is cylindrically shaped.

9. The industrial parts washer of claim 5 further including a ring having a plurality of spaced apart nozzles mounted thereto, said ring adapted to

substantially surrounding the part to provide a plurality of fluid paths directed toward the part.

10. The industrial parts washer of claim 1 wherein said chamber is translucent to allow viewing of the part from outside of the chamber when said chamber is in said second position.

11. The industrial parts washer of claim 1 further including a fluid circulating and filtration system operable to remove undesirable particles from said fluid after said fluid contacts the part and re-supply said nozzle with filtered cleaning fluid.

12. The industrial parts washer of claim 1 further including an exhaust system coupled to said chamber to remove cleaning fluid vapor from said sealed volume.

13. An industrial parts washing station comprising:

- a first part stand having a first frame adapted to support the part;
- a second part stand having a second frame adapted to support the part;
- a first chamber selectively moveable from a first position allowing access to said first frame to a second position to enclose said first frame;
- a first nozzle moveably positioned within said first chamber, said first nozzle selectively operable to spray cleaning fluid within said first chamber;
- a second chamber selectively moveable from a first position allowing access to said second frame to a second position enclosing said second frame;
- and
- a second nozzle moveably positioned within said second chamber, said second nozzle selectively operable to supply a drying agent within said second chamber.

14. The industrial parts washing station of claim 13 further including a lift assembly operable to transfer the part from said first frame to said second frame when said first and second chambers are in the first position.

15. The industrial parts washing station of claim 13 further including a washing ring slidably positioned within said first chamber, said nozzle and a plurality of additional nozzles being mounted to said wash ring.

16. The industrial parts washing station of claim 13 wherein said first chamber is substantially identical to said second chamber.

17. The industrial parts washing station of claim 13 wherein said first chamber sealingly engages said first part stand when said first chamber is in said second position.

18. The industrial parts washing station of claim 14 wherein said first chamber is cantilever mounted on a slide moveable relative to said first part stand.

19. The industrial parts washing station of claim 18 wherein said slide includes a base portion positioned offset from and beneath said first chamber, a portion of said lift assembly being positioned between said base portion and said first chamber.

20. The industrial parts washing station of claim 13 wherein said drying agent is air.

21. An industrial parts washer for removing debris from a machined part, the industrial parts washer comprising:

a structure adapted to support the part in a cantilevered manner;

a slidable chamber selectively moveable between a first position clear of the part and a second position where said chamber substantially encloses the part; and

a nozzle positioned within said chamber, said nozzle being coupled to a pressurized fluid source for washing the part.

22. The industrial parts washer of claim 21 wherein said structure includes a stand, a hub rotatably coupled to said stand and a frame fixed to said hub, said frame being adapted to support the part in said cantilevered manner.

23. The industrial parts washer of claim 22 wherein said hub and frame are rotatable about an axis substantially parallel to the ground.

24. The industrial parts washer of claim 23 wherein said chamber is substantially cantilever mounted to a slide selectively operable to move said chamber between said first and second positions, said slide, said chamber and said stand forming a closed volume when said chamber is in said second position.

25. The industrial parts washer of claim 24 wherein said nozzle is moveable within said closed volume.

26. The industrial parts washer of claim 25 further including a plurality of nozzles mounted to said stand.

27. The industrial parts washer of claim 26 further including a vacuum source coupled to said chamber, said vacuum source operable to remove airborne fluid from said closed volume.